



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9139; Directorate Identifier 2016-CE-023-AD]

RIN 2120-AA64

Airworthiness Directives; Mitsubishi Heavy Industries, Ltd. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Mitsubishi Heavy Industries, Ltd. Models MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-26A, MU-2B-30, MU-2B-35, MU-2B-36, MU-2B-36A, MU-2B-40, and MU-2B-60 airplanes. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as reports of cracks found in the wing spacer plates. We are issuing this proposed AD to require actions to detect and correct cracks in the wing spacer plates, which could result in reduced structural integrity of the wings and loss of control.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Mitsubishi Heavy Industries America, Inc., c/o Turbine Aircraft Services, Inc., 4550 Jimmy Doolittle Drive, Addison, Texas 75001; telephone: (972) 248-3108, ext. 209; fax: (972) 248-3321; Internet: <http://mu-2aircraft.com>. You may review this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9139; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Andrew McAnaul, Aerospace Engineer, FAA, ASW-143 (c/o San Antonio MIDO), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; phone: (210) 308-3365; fax: (210) 308-3370; email: andrew.mcanaul@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2016-9139; Directorate Identifier 2016-CE-023-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The Japan Civil Aviation Bureau (JCAB), which is the aviation authority for Japan, has issued AD No. TCD-8783-2016, dated June 28, 2016 (referred to after this as “the MCAI”), to correct an unsafe condition for certain Mitsubishi Heavy Industries, Ltd. (MHI) Models MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-30, MU-2B-35, and MU-2B-36, airplanes. You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2016-9139.

As part of the MHI MU-2B aging aircraft program, one-piece and three-piece main wings were subjected to detailed teardown inspections, and cracks were found in the wing spacer plates attached to the forward lower spar area at wing station 580. It was determined that the cracks resulted from fatigue caused by flight loads.

Japan is the State of Design for MHI Models MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-30, MU-2B-35, and MU-2B-36 airplanes, which the MCAI AD applies to, and the United States is the State of Design for MHI Models MU-2B-26A, MU-2B-36A, MU-2B-40, and MU-2B-60 airplanes.

Related Service Information under 1 CFR part 51

Mitsubishi Heavy Industries, Ltd. has issued MU-2 Service Bulletin No. 245, dated April 21, 2016, and MU-2 Service Bulletin No. 107/57-005, dated May 3, 2016. These service bulletins describe procedures for doing a fluorescent penetrant inspection of the wing spacer plates for cracks and replacing cracked wing spacer plates with an improved part. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this NPRM.

FAA's Determination and Requirements of This Proposed AD

The Models MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-30, MU-2B-35, and MU-2B-36 airplanes have been approved by the aviation authority of another country, and are approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

The procedures described in this proposed AD meet the FAA's expectations for flight with known cracks described in Chapter 6 in FAA Advisory Circular (AC) 23-13A Fatigue, Fail-Safe and Damage Tolerance Evaluation of Metallic Structure for Normal, Utility, Acrobatic, and Commuter Category Airplanes.

In addition, we are including the Models MU-2B-26A, MU-2B-36A, MU-2B-40, and MU-2B-60 airplanes for which the United States is the State of Design and the unsafe condition exists and is likely to exist or develop in other products of the same type design.

The Models MU-2B-10 and MU-2B-15 are not included in Japan Civil Aviation Bureau (JCAB) AD No. TCD-8783-2016, dated June 28, 2016, or any of the service bulletins referenced in this proposed AD. The FAA does not believe there are any of these airplanes currently in operation, but are including them as a part of this proposed AD.

Costs of Compliance

We estimate that this proposed AD will affect 209 products of U.S. registry. We also estimate that it would take about 8 work-hours per product to comply with the fluorescent penetrant inspection requirement of this proposed AD. The average labor rate is \$85 per work-hour.

Based on these figures, we estimate the cost of the fluorescent penetrant inspection requirement of this proposed AD on U.S. operators to be \$142,120, or \$680 per product.

In addition, we estimate the following to do any necessary follow-on actions:

It would take about 200 work-hours and require parts costing \$500, for a cost of \$17,500, per product to replace a cracked wing spacer plate on one side of the airplane.

It would take about 250 work-hours and require parts costing \$1,000, for a cost of \$22,250, per product to replace a cracked wing spacer plate on both sides of the airplane.

We have no way of determining the number of products that may need this action.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new AD:

Mitsubishi Heavy Industries, Ltd.: Docket No. FAA-2016-9139; Directorate Identifier 2016-CE-023-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the following Mitsubishi Heavy Industries, Ltd. (MHI) models airplanes that are certificated in any category:

(1) MU-2B-10 and MU-2B-15: Serial Numbers (S/Ns) 101 and 103 through 120.

Note 1 to paragraph (c)(1) of this AD: The Models MU-2B-10 and MU-2B-15 are not included in Japan Civil Aviation Bureau (JCAB) AD No. TCD-8783-2016, dated June 28, 2016, or any of the service bulletins referenced in this AD. The FAA does not believe there are any of these airplanes currently in operation, but are including them as a part of this AD.

(2) MU-2B-20, MU-2B-25, and MU-2B-26: S/Ns 102 and 121 through 347, except 313 and 321;

(3) MU-2B-25, MU-2B-26, MU-2B-26A, and MU-2B-40: S/Ns 313SA, 321SA, and 348SA through 459SA;

(4) MU-2B-30, MU-2B-35, and MU-2B-36: S/Ns 502 through 696, except 652 and 661; and

(5) MU-2B-36A and MU-2B-60 airplanes: S/Ns 661SA, and 697SA through 1569SA.

(d) Subject

Air Transport Association of America (ATA) Code 57: Wings.

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as reports of cracks found in the wing spacer plates. We are issuing this AD to detect and correct cracks in the wing spacer plates, which could result in reduced structural integrity of the wings and loss of control.

(f) Compliance

Comply with paragraphs (g)(1) through (3) of this AD using the following service bulletins within the compliance times specified below, unless already done. The Models MU-2B-10 and MU-2B-15 currently do not have service bulletins associated with them. The FAA does not believe any of these airplanes are currently in operation. If they do become operational, an alternative method of compliance must be obtained to comply with this AD.

(1) For Models MU-2B-20, MU-2B-25, and MU-2B-26: S/Ns 102 and 121 through 347, except 313 and 321, and MU-2B-30, MU-2B-35, and MU-2B-36: S/Ns 502 through 696, except 652 and 661: Use Mitsubishi Heavy Industries, Ltd. (MHI) MU-2 Service Bulletin No. 245, dated April 21, 2016.

(2) Models MU-2B-25, MU-2B-26, MU-2B-26A, and MU-2B-40: S/Ns 313SA, 321SA, and 348SA through 459SA, and MU-2B-36A and MU-2B-60 airplanes: S/Ns 661SA, and 697SA through 1569SA: Use MHI MU-2 Service Bulletin No. 107/57-005, dated May 3, 2016.

(g) Actions

(1) Do an initial fluorescent penetrant inspection of the wing spacer plates at whichever of the following compliance times that occurs later, and repetitively inspect thereafter at intervals not to exceed 2,000 hours time-in-service (TIS). Do the inspections following the Instructions section of the service bulletins identified in paragraph (f) of this AD, including all subparagraphs, as applicable.

(i) At or before accumulating 7,500 hours TIS; or

(ii) Within the next 200 hours TIS after the effective date of this AD or within the next 12 months after the effective date of this AD, whichever occurs first.

(2) During any inspection required in paragraph (g)(1) of this AD, including all subparagraphs, if any crack is found that is 0.6-inch or more in length, before further flight after the inspection in which the crack is found, replace the cracked wing spacer plate with an improved wing spacer plate, part number (P/N) 017A-11102-13 or 017A-11102-14. Do the replacement following the Instructions section of the service bulletins identified in paragraph (f) of this AD, including all subparagraphs, as applicable. Installing the improved wing spacer plates terminates the repetitive inspections required in paragraph (g)(1) of this AD.

(3) During any inspection required in paragraph (g)(1) of this AD, including all subparagraphs, if any crack is found that is less than 0.6-inch in length, repetitively fluorescent penetrant inspect for crack growth every 600 hours TIS after the inspection in which the crack was found. Do the inspections following the Instructions section of the service bulletins identified in paragraph (f) of this AD, including all subparagraphs, as applicable. If it is found during any required inspection that the crack has grown to 0.6-inch in length or more, before further flight, replace the wing spacer plate as specified in paragraph (g)(2) of this AD.

(4) Installing improved wing spacer plates, part number (P/N) 017A-11102-13 or 017A-11102-14, terminates the repetitive inspections required in paragraph (g)(1) of this AD. You may install the improved wing spacer plates at any time to terminate the repetitive inspection requirement of this AD.

(h) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Andrew McAnaul, Aerospace Engineer, FAA, ASW-143 (c/o San Antonio MIDO), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; phone: (210) 308-3365; fax: (210) 308-3370;

email: andrew.mcanaul@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) *Airworthy Product*: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(i) Related Information

Refer to MCAI JCAB AD No. TCD-8783-2016, dated June 28, 2016, for related information. You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9139. For service information related to this AD, contact Mitsubishi Heavy Industries America, Inc., c/o Turbine Aircraft Services, Inc., 4550 Jimmy Doolittle Drive, Addison, Texas 75001; telephone: (972) 248-3108, ext. 209; fax: (972) 248-3321; Internet: <http://mu-2aircraft.com>. You may review this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued in Kansas City, Missouri, on September 8, 2016.

Pat Mullen,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2016-22182 Filed: 9/15/2016 8:45 am; Publication Date: 9/16/2016]